



NavMate®
Navigation System



2.0 User Manual

Copyright © 2003

All rights reserved.

NavMate Navigation System User Manual

This document and the software described in it are furnished under license and may be used or copied only in accordance with such license. Except as permitted by such license, the contents of this document may not be disclosed to third parties, copied, or duplicated in any form, in whole or in part, without the prior written permission of Horizon Navigation, Inc.

This document contains proprietary and confidential information of Horizon Navigation, Inc. and its licensors. The contents of this document are for informational use only, and the contents are subject to change without notice. Horizon Navigation, Inc. and its licensors assume no responsibility or liability for any errors or inaccuracies that may appear in this book.

Restricted Rights Legend. For defense agencies: Use, reproduction, or disclosure is subject to restrictions set forth in subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 52.227-7013, and or similar successor clauses in the FAR, or the DOD or NASA FAR Supplement.

Unpublished right reserved under the Copyright Laws of the United States.

NavMate Navigation System is a trademark of Horizon Navigation, Inc. All other products or name brands are trademarks of their respective holders.

Printed in the USA.

Preface

Your NavMate Navigation System provides turn-by-turn route guidance while traveling to your destination. Before operating, take a few minutes to review the safety and operating instructions in this manual so you can quickly and safely become familiar with your navigation system's many features.

This *User Manual* describes system components, explains the navigation system's functions, and provides details on:

- using the control buttons
- entering destinations
- understanding the different screens available on your navigation system
- adjusting user preferences

A handy Quick Reference Card is also included, which summarizes important information in an easy-to-follow chart format.

Should you have additional questions about your NavMate Navigation System, please call 1-86Navmate1 (866-286-2831) or visit www.horizonnav.com.

Note. All users should read this manual prior to operating your navigation system. Keep the *User Manual* in your vehicle for quick reference when traveling. If you sell the vehicle, please leave this manual with the vehicle for use by the new owner.

Safety Information and Precautions

WARNING! Please read and follow the following safety precautions. Failure to follow the instructions below may increase your risk of collision and personal injury.

The *Please Drive Safely* screen is displayed each time the NavMate Navigation System is turned ON as a reminder to make use of the system's navigational aids in a safe manner.



Before using the NavMate Navigation System, read this entire manual. Make sure that you are familiar with the system's features and know how to operate the system. Proper use of the NavMate Navigation System includes the following guidelines:

- The NavMate Navigation System is not a substitute for your personal judgment. The route suggestions should never supersede any local traffic regulation or your personal judgment and/or knowledge of safe driving practices. Prior to completing any maneuvers suggested by your navigation system (for example, a U-turn or a left turn), verify that you can legally and safely complete the maneuver. Do not follow route suggestions if they direct you to perform an unsafe or illegal maneuver, would place you in an unsafe situation, or would route you into an area that you consider unsafe.
- Glance at the screen only when necessary and safe to do so. Let the computer voice guide you. If prolonged viewing is necessary, pull off the road to a safe location.

-
- Do not use the NavMate Navigation System to locate emergency services (such as police, fire stations, hospitals, and clinics). The database may not include all emergency service providers. Use your own best judgment and ask for directions in these situations.
 - When the vehicle is in motion, the NavMate Navigation System's display unit should only be programmed by the front seat passenger. The driver should not program the system unless the vehicle is parked in a safe location.
 - The NavMate Navigation System's map database provides information on suggested routes without regard to factors that may affect your driving experience or the time required to arrive at your destination. For example, the system does not reflect road detours, closures or construction, some road characteristics (e.g., road surface, slope or grade, weight or height restrictions, etc.), temporary traffic congestion, weather conditions, and similar factors. Use your personal judgment or the navigation system's "Detour" function as the situation warrants to calculate an alternate route.
 - To use the system as effectively and safely as possible, obtain updated system CDs as they become available.
 - Do not position the display unit in a location that obstructs driver view of the road, airbag deployment, instruments or controls to operate the vehicle.
 - Adjust the display unit so the screen can be viewed with just a quick glance.
 - Set the volume level of the display unit at a level that allows you to hear outside traffic and emergency services.
 - Do not disassemble or modify the system as this may lead to damage. If a problem occurs, stop using the system immediately and contact your dealer. Problems that require immediate attention include lack of sound or video, noxious odors or smoke from the computer or display unit, or foreign objects dropped inside the unit.
 - Wear your seatbelt at all times to avoid collisions with anything in the vehicle's interior, including the NavMate Navigation System.

NavMate Navigation System Limited Warranty

The NavMate System Limited Warranty is provided by Horizon. Horizon will provide at no cost for the repair or replacement of covered components during the Limited Warranty Period in accordance with the following terms, conditions, and limitations:

Eligibility

Original and subsequent purchasers of NavMate installed by an Authorized Horizon Distributor, Sales and Service Center or Sales Center are eligible to enforce the conditions and terms of limited warranty for the duration of the applicable Limited Warranty Period.

Limited Warranty Period

- If NavMate is installed on a new or used vehicle: 90 days from date of installation.

Parts and Services Covered/Parts and Services Not Covered

Except as follows, all NavMate parts (and applicable labor) are covered at no charge when failure is due to a defect in a part, material or workmanship during normal use for the duration of the applicable Limited Warranty Period.

Limitations and Exclusions

The Limited Warranty does not cover:

- Any hardware used to mount the display unit in the vehicle.
- Repairs and replacement due to recalls by vehicle manufacturer.
- Repairs caused by damage or unreasonable use, road hazard, accident, fire or other casualty, misuse, negligence, or failures caused by modifications or parts not authorized by or supplied by the vehicle manufacturer or NavMate manufacturer or warrantor.
- Damage from the environment (airborne fallout, acts of war, flood, chemicals, tree sap, salt, hail, windstorm, lightning).
- Damage due to theft, vandalism or riot.
- Customer applied chemicals or accidental spills.
- Repairs needed to a covered part caused by a non-covered part.
- Repairs if the odometer is altered, disconnected, broken, repaired or replaced so that the actual mileage cannot be determined.
- To the extent allowed by laws, loss of use of vehicle, loss of time, inconvenience, commercial loss, consequential damages and personal expenses.

-
- Repairs performed outside of the 50 states and Canada, repairs required because of operation outside of the 50 states and Canada.
 - Any NavMate installed and repaired by any entity other than an Authorized Horizon Distributor, Sales and Service Center or Sales Center.
 - THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED ABOVE.
 - THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY.
 - ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE LIMITED WARRANTY PERIOD AND TERMS SET FORTH ABOVE.
 - SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.
 - THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH MAY VARY FROM STATE TO STATE.

The NavMate Navigation Software Limited Warranty and End User License Agreement are outlined in the User Manual provided with the NavMate CD.

Procedures for Obtaining Repair

During the applicable Limited Warranty Period, call the Horizon Customer Service at 1-866-286-2831. Proof of the NavMate system installation date, vehicle delivery date and vehicle mileage at time of the installation is required to obtain limited warranty repair. For further information on limited warranty performance and coverage, contact the NavMate Warrantor, Horizon , through its Customer Service Operations Call Center at 1-866-286-2831 or write to:

Warrantor:

Horizon Navigation Inc.
4701 Patrick Henry Drive
STE 1301
Santa Clara, CA 95054 USA

Portable NavMate Navigation System Limited Warranty

The NavMate System Limited Warranty is provided by Horizon. Horizon will provide at no cost for the repair or replacement of covered components during the Limited Warranty Period in accordance with the following terms, conditions, limitations, and exclusions:

Eligibility

Original and subsequent purchasers of Portable NavMate are eligible to enforce the conditions and terms of this limited warranty for the duration of the applicable Limited Warranty Period.

Limited Warranty Period

90 days from the date of purchase for all components except for Bag, Battery Module and Display Mount. Bag and Battery Module are covered under warranty for 90 days from the date of purchase. Display Mount is not covered under this warranty. End user must provide evidence in the form of a receipt or an invoice to prove that the Product is within the Warranty Period to obtain Warranty Service. Any alteration and removal of factory applied labels that include serial numbers will result in termination of Warranty Agreement.

Parts and Services Covered/Parts and Services Not Covered

Except as follows, all Portable NavMate parts (and applicable labor) are covered at no charge when failure is due to a defect in a part, material or workmanship during normal use for the duration of the applicable Limited Warranty Period.

Limitations and Exclusions

The Limited Warranty does not cover:

- Any hardware used to mount the display unit in the vehicle.
- Repairs and replacement due to recalls by vehicle manufacturer.
- Repairs caused by damage or unreasonable use, road hazard, accident, fire or other casualty, misuse, negligence, or failures caused by modifications or parts not authorized by Portable NavMate manufacturer or warrantor.
- Damage from the environment (airborne fallout, acts of war, flood, chemicals, tree sap, salt, hail, windstorm, lightning).
- Damage due to theft, vandalism or riot.
- Customer applied chemicals or accidental spills.

-
- Repairs needed to a covered part caused by a non-covered part.
 - To the extent allowed by law, loss of use of vehicle, loss of time, inconvenience, commercial loss, consequential damages and personal expenses.
 - Repairs performed outside of the 50 states and Canada, repairs required because of operation outside of the 50 states and Canada.
 - Any Portable NavMate repaired by any entity other than an Authorized Horizon Service Center.
 - THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED ABOVE.
 - THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY.
 - ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE LIMITED WARRANTY PERIOD AND TERMS SET FORTH ABOVE.
 - SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.
 - THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH MAY VARY FROM STATE TO STATE.

The NavMate Navigation Software Limited Warranty and End User License Agreement are outlined in the User Manual provided with the NavMate CD.

Procedures for Obtaining Repair

During the applicable Limited Warranty Period, call the Horizon Customer Service at 1-866-286-2831. End user must provide evidence in the form of a receipt or an invoice to prove that the Product is within the Warranty Period to obtain Warranty Service. For further information on limited warranty performance and coverage, contact the NavMate Warrantor, Horizon , through its Customer Service Operations Call Center at 1-866-286-2831 or write to:

Warrantor: Horizon Navigation Inc.
 4701 Patrick Henry Drive
 STE 1301
 Santa Clara, CA 95054 USA

Table of Contents

Preface	iii
Safety Information and Precautions	iv
NavMate Navigation System Limited Warranty	vi
Eligibility	vi
Limited Warranty Period	vi
New Vehicle	vi
Used Vehicle	vi
Parts and Services Covered/Parts and Services Not Covered	vi
Limitations and Exclusions	vi
Procedures for Obtaining Repair	viii
Portable NavMate Navigation System Limited Warranty	ix
Eligibility	ix
Limited Warranty Period	ix
Parts and Services Covered/Parts and Services Not Covered	ix
Limitations and Exclusions	ix
Procedures for Obtaining Repair	x
1 Introduction to Your Navigation System	1
Vehicle Direction-Sensing Electronics	1
Computerized Map and Information Database	2
Metro Area Coverage	2
Intertown Coverage	2
Map and Information Database	2
NavMate Navigation System	5
System Components	5
Basic Mechanics	5
Portable NavMate Navigation System	6
System Components	6
Basic Mechanics	7
2 Quick Start	8
Step 1 — Start up/Main Menu	8
NavMate Navigation System	8
Portable NavMate Navigation System	8

Step 2 — Select Destination	9
Step 3 — Select Route Criteria	9
Step 4 — Map/Guide along Route	10
Step 5 — Arrive at Destination	10
3 Using Your Navigation System	11
What Are All These Buttons?	11
Controls and Buttons	12
System Controls	12
Core Buttons	12
Function Buttons	13
Navigation Process Flow	15
List Mode vs. Spell Mode	16
When to Use List Mode or Spell Mode	17
Using List Mode	18
Using Spell Mode	19
4 Selecting a Destination	21
Address/Intersection	21
Points of Interest	23
By Category	24
By First Few Letters	25
By Both Methods	26
Previous Destination	27
Address Book	27
Selecting an Address Book Entry as a Destination	28
Adding, Deleting, or Editing in the Address Book	28
Freeway Entrance/Exit	29
5 Selecting Route Criteria	31
6 Route Calculation and Guidance Screens	33
Route Calculation Screen	34
Please Proceed Screen	34
Planned Route Screen	35
Guide Display Screen	36
True View (Intersection) Screen	37
Map Display Screen	38
Current Location Screen	40

Arrival Screen	41
7 Detours, Off-Route, and Interruptions	42
Detour Options	42
Off-Route Procedures	43
Route Interruption	43
8 Trail Mode	45
9 Portable Mode	48
10 Option Menu	50
Preferences	50
System Information	51
Vehicle Position	51

1 Introduction to Your Navigation System

As you travel, your NavMate Navigation System functions as your co-pilot, providing turn-by-turn visual and voice assistance to direct you to your selected destination. Because the system knows where you are and where you want to go, it can quickly calculate step-by-step directions that provide the shortest time route to any destination available on the included navigation map CD. The map CD includes tens of thousands of roadway and mapping destinations, and preprogrammed point of interest (POI) locations in over 40 categories. Simply enter into your NavMate Navigation System where you want to go, and its advanced engineered intelligence does the rest.

With your NavMate Navigation System, if you deviate from the directed route, the navigation system will recalculate the route automatically to determine a new route from your current location. If you want to intentionally avoid certain roads or freeways, your NavMate will do that too.

The NavMate Navigation System uses vehicle direction-sensing electronics, Global Positioning System (GPS) satellites, and a roadway map database to calculate and display travel directions. The system's antenna picks up signals from a constellation of 24 satellites orbiting the earth. Using the signals from several satellites, the GPS receiver inside the system's computer calculates your position to within 30 meters. The navigation system's sophisticated software and additional sensors are used to provide the highly accurate positioning necessary to provide real-time, turn-by-turn route guidance.

Vehicle Direction-Sensing Electronics

The NavMate Navigation System's computer uses signals from the vehicle's

odometer and a gyroscope, together with GPS information, to accurately determine vehicle heading and position on a digital map. This information is relayed to you, both verbally and in map-format, during route guidance as you proceed to your selected destination. When in Portable mode, the odometer signal is not used.

Computerized Map and Information Database

The map used by your NavMate Navigation System was digitally scanned from high-resolution aerial photographs for most areas of the country and stored on Map CDs. This data is enhanced with a variety of useful travel information, such as freeway signage and over 500,000 point of interest locations in over 40 categories, ranging from tourist attractions, golf courses and government buildings to gas stations, airports, restaurants, hotels, hospitals, and automated teller machines (ATMs).

Metro Area Coverage

Metro Area Coverage includes all defined roads within a city as well as the area's entire road network (interstate highways, state and county roads). In a metro area, a typical segment of a roadway may contain up to 150 pieces of information, such as road type (freeway, ramp, city street, to name a few), one-way restrictions, turning restrictions, and alternate street names. It is this vast quantity of information in a metro area that allows your navigation system to provide accurate route planning and directional guidance. Metro Area Coverage is not yet complete for all metro areas, though ongoing digital mapping is continually expanding the coverage.

Intertown Coverage

Intertown Coverage is provided for more rural areas of the country to seamlessly connect the detailed areas. The "City Center" point of interest category is useful for routing to cities where Metro Area Coverage is not available. This information includes all roads in the American Automobile Association's (AAA) state road maps.

Map and Information Database

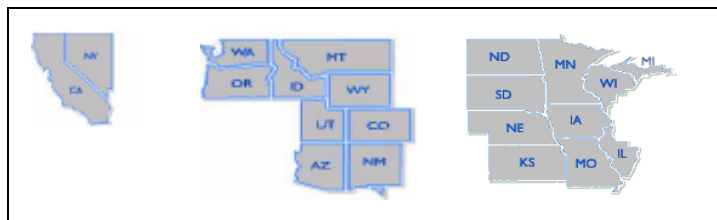
Your NavMate Navigation System's map and information database is

constantly being updated for completeness and accuracy. While the database was judged to be as accurate as possible at the time of its release, a map database can never be 100% accurate. Roadway information that is maintained in the map databases, such as turning restrictions or road names, changes over time. In addition, points of interest, such as restaurants, hotels, and gas stations, also change over time. The complexity of keeping this directory current means that some pieces of information may be missing or out-of-date at times.

Mapping and travel information for the USA is compressed into 9 Map CDs, together with navigation software to operate the system. They are:

- Map CD 1 - California / Nevada, USA
- Map CD 2 - Pacific NW / Mountain, USA
- Map CD 3 - Upper Midwest, USA
- Map CD 4 - South Central, USA
- Map CD 5 - Great Lakes, USA
- Map CD 6 - Ohio Valley, USA
- Map CD 7 - Northeast, USA
- Map CD 8 - Mid Atlantic, USA
- Map CD 9 - Southeast, USA

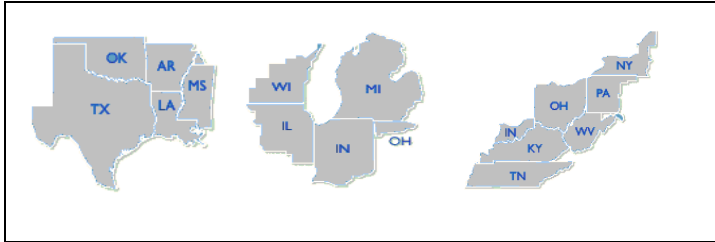
For information on obtaining additional Map CDs or updates, call 1-86NAVMATE1 (1-866-286-2831) or visit www.horizonnav.com.



Map CD 1

Map CD 2

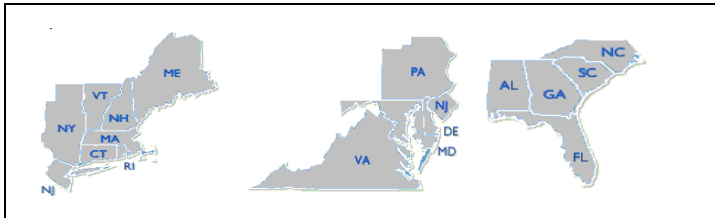
Map CD 3



Map CD 4

Map CD 5

Map CD 6



Map CD 7

Map CD 8

Map CD 9

NavMate Navigation System

System Components

The following hardware components make up your NavMate:

- Wire Harness – connects system to the vehicle's electrical system.
- Navigation System Computer – includes removable CD featuring digital map and information database, and navigation application software to operate the system.
- Display Cable – connects navigation computer to the display unit.
- GPS Antenna – installed on the vehicle deck lid, roof, instrument panel, or rear window package shelf, this antenna must have a clear view of the sky to receive the GPS satellite signals.
- Computer Mounting Bracket – used to mount the computer in a safe location, such as the cargo compartment or under a seat.
- Display Unit – typically mounted on or near the instrument panel, this features a color LCD display screen, built-in speaker, and control buttons.
- Map CD – One Map CD is included with this kit. To order additional and updated Map CDs please call 1-86NAVMATE1 (1-866-286-2831) or visit www.horizonnav.com.

Basic Mechanics

A special harness connects the navigation system to your vehicle's electrical system circuits. Connection locations vary depending on vehicle design. In brief, however, this is how the navigation system is connected:

- Ignition ON provides power to wake up the navigation system.
- Battery circuit powers the navigation system's computer when the ignition is OFF. This minimal source of power is needed to store the vehicle's last location/position, similar to the way the time on your vehicle's clock is stored while the car is OFF.
- Ground connection completes electrical circuits.
- Vehicle speed sensor circuit provides information on how fast the vehicle is traveling.

- Reverse sensor circuit signals when the vehicle is backing up.
- A 3 amp fuse protects the navigation system from system fluctuations.
- A video display cable connects the computer to the display unit, and an antenna wire connects the GPS antenna to the system.

Portable NavMate Navigation System

System Components

- Navigation System Computer – includes removable CD featuring digital map and information database, and navigation application software to operate the system.
- Display Cable – connects navigation computer to the display unit.
- GPS Antenna – installed on the roof, this antenna must have a clear view of the sky to receive the GPS satellite signals.
- Display Unit – typically mounted on or near the instrument panel, this features a color LCD display screen, built-in speaker, and control buttons.
- NavMate Bag and Battery Module – contains a foam insert to provide protection to NavMate components contained in the bag. This uniquely designed bag has an upper tray for stowing away the display unit and display cable. In addition, battery pack and module are mounted under the tray. Both tray and bag have air vents to allow for proper airflow.
- Display Mount – Typically mounted on or near the instrument panel of the vehicle. For mounting instructions and care please carefully read Installation Manual included with this kit.
- Wall Charger – used to charge batteries in the NavMate bag through a 110V AC outlet. Please charge the batteries once a month for 14 hours or when red bulb on top of the tray illuminates. For more information on care and handling of the battery pack please read the Installation Manual included with this kit.
- Map CD – One Map CD is included with this kit. To order additional and updated Map CDs please call 1-86NAVMATE1 (1-866-286-2831) or visit www.horizonnav.com.

Basic Mechanics

- Cigarette lighter adapter from the battery module is used to power the system from vehicle battery. Please note that in some vehicles, NavMate will stay on even when the key is removed from the vehicle. Display unit can be turned off using the ON/OFF switch located on the left side. Always unplug the cigarette lighter adapter when vehicle is parked for more than four hours. The batteries in NavMate ensure a normal shutdown in order to store vehicle's last location, previous destinations, and address book information.
- The batteries do not charge in the car. Use the wall charger provided with the kit to charge the batteries once a month for 14 hours or when red bulb on top of the tray illuminates.
- Portable NavMate does not use a vehicle speed sensor. It is recommended that the GPS antenna be mounted on the roof of the vehicle, in clear view of the sky to receive a GPS signal.
- The system will take approximately seven minutes to initialize when it is used for the first time or when battery has been drained.

2 Quick Start

Time to get you on the road with your NavMate Navigation System. Follow these five easy steps and you are on your way.


WARNING! Before operating your NavMate, please carefully read and follow the instructions provided in the “Safety Information and Precautions” section of this manual.

Step 1 — Start up/Main Menu

NavMate Navigation System

With the ignition switch in the ‘run’ or ‘accessory’ position, power is supplied to NavMate. The system automatically turns on when you turn on your vehicle, and turns off when you turn off your vehicle. (Refer to “System Controls” on page 12 for more details on the power switch.)

When your vehicle is started, your NavMate will automatically default to the *Please Drive Safely* screen. Please read and follow the instructions on this screen carefully.

When the system is turned on, the *Please Drive Safely* screen is displayed. Press  to accept, and the *Main Menu* screen is displayed.

Note: If a key is not pressed within 10 seconds, the system goes into “sleep” mode and the screen turns gray. The gray screen will turn on only when you are on the *Please Drive Safely* screen. Press any key to return to the *Please Drive Safely* screen.

Portable NavMate Navigation System

When the cigarette lighter adapter is plugged into the vehicle, power is supplied to your NavMate. For most vehicles, the system automatically turns on when adapter is plugged in and turns off when adapter is unplugged. For other vehicles, the system will turn on and off with vehicle ignition key.

When the system is turned on, the *Please Drive Safely* screen is displayed.

Press **ENTER** to accept, and the *Main Menu* screen is displayed.

Note: If a key is not pressed within 10 seconds, the system goes into “sleep” mode and the screen turns gray. The gray screen will turn on only when you are on the *Please Drive Safely* screen. Press any key to return to the *Please Drive Safely* screen.

Screen 1. Please Drive Safely Screen



Step 2 — Select Destination

At the *Main Menu/Where do you want to go?* screen, you have many ways to select a destination.

For this example, let's select a Point of Interest.

- Use the ▼ button to highlight/select the “Point of Interest” option. Press **ENTER**.
- Highlight/select the “By Category” option. Press **ENTER**.
- Use the ▼ button to highlight/select a listed point of interest entry. Press **ENTER**.
- Use the ▼ button to highlight/select the city you want. Press **ENTER**.

Step 3 — Select Route Criteria

When the *Select Route Criteria* screen is displayed, press **ENTER** to select the

default criteria options. While the navigation system calculates the route to the selected point of interest, a percentage bar indicates progress.

Step 4 — Map/Guide along Route



Proceed to the highlighted route and drive while the navigation system provides audible and visual guidance to your destination.

Step 5 — Arrive at Destination

That's it! You've arrived at the selected destination.

Refer to the rest of this manual to become more familiar with the many options available on your navigation system.

3 Using Your Navigation System

The best way to learn about this product is to explore it, play with it, and get familiar with it while observing the safety precautions discussed earlier in the “Safety Precautions and Information” section of this manual. Once you understand the core buttons —  ,  , and the arrow buttons — getting around the system is very easy. The display screens are intuitive, and the mechanisms used between the functions are similar throughout.

You will find that your navigation system is not only useful, but fun to use as well. Do not be afraid to press the buttons — all buttons. Follow the instructions on the screens and verbal prompts, and soon you will wonder how you have existed without a navigation system. Earlier we said that your navigation system acts as a “co-pilot”; since you’d want to trust your co-pilot, getting familiar with your navigation system will easily allow you to trust it too.

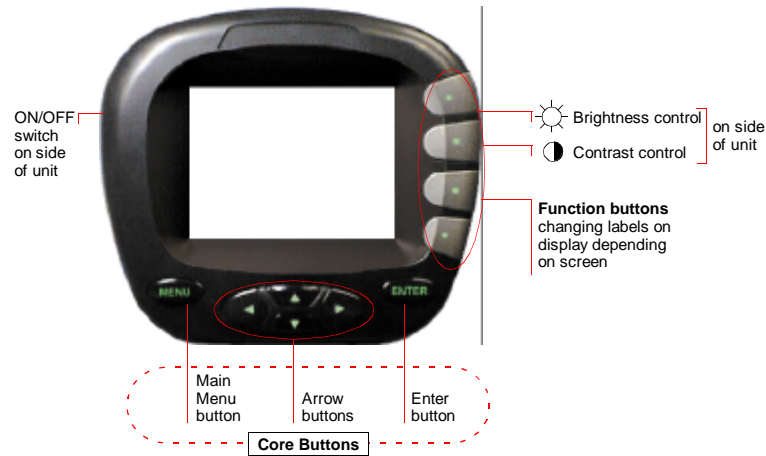
WARNING! Before operating your NavMate, please carefully read and follow the instructions provided in the “Safety Information and Precautions” section of this manual.

What Are All These Buttons?

If you ever ask this question while using your navigation system, try it, and you’ll know. That’s the best way. No button will break the system, so just try it!

Figure 1 illustrates the navigation system, its controls, and buttons. The sections that follow provide a brief overview of these controls and buttons.

Figure 1. NavMate Navigation System Display Unit



Controls and Buttons

System Controls

There are three system controls on your display unit. They are:

- *ON/OFF switch* – The ON/OFF switch, at the left side of the display unit, enables power to your display unit.
- *Brightness control* - On the right side of the display unit, this thumb wheel adjusts the display unit's screen brightness. Use this control when the screen display's brightness needs adjusting.
- *Contrast control* – On the right side of the display unit, this thumb wheel adjusts the screen display's screen color contrast. Use this control when the screen display's clarity needs adjustment.

Core Buttons

The buttons below the navigation system's display screen are called the *core buttons*. These buttons are crucial to use your navigation system and to select your destination. They generally have similar functionality too no matter what screen is displayed. These button functions are as follows:

- **MENU** – Pressing this button displays the *Main Menu/Where do you want to go?* screen. It is the first step to selecting a destination. Also, system options are accessed from this screen through the **OPT** function button.
- **ENTER** – Pressing this button is integral to all functions within the system. Upon highlighting or selecting an option or destination, press **ENTER** to confirm your selection.
- **▲** or **▼** and **◀** or **▶** – The arrow buttons allow you to scroll up or down in a list and highlight an entry. Or, when spelling, you can scroll either up and down the alphanumeric characters, or right or left in cursor positions. In addition, using the **▲** or **▼** buttons, you can adjust system options, such as increasing/decreasing volume levels, or adjusting the map scale.

These buttons are described in more detail throughout this manual.

Function Buttons

The buttons on the right side of the screen/display unit are called *function buttons*. They have changing labels depending on the screen displayed; consequently, they also have changing functions.

You will encounter and use some function buttons more often than others. On some screens, not all four buttons are displayed; only currently active buttons are shown.

Although all details about the functions that these buttons relate to has yet to be discussed, Table 1 provides some definition for reference. Further details are described in context within this manual.

Table 1. Function Buttons At-A-Glance

Function Button	Brief Description
ADD	Add addresses to Address Book.

Table 1. Function Buttons At-A-Glance (Continued)




















Function Button	Brief Description
	Return to previous screen.
	Clear POI character entries.
	Delete address from Address Book or Previous Destination.
	Cancel route guidance or select detour options.
	Revise an Address Book entry.
	Display the latitude, longitude, and altitude of your current location.
	Display turn-by-turn guidance.
	Display current location.
	Select from list.
	Display map.
	Enter current location into Address Book.
	Adjust system options.
	Preview route including turns, roads, and distances.
	Calculate new route.
	Spell to quickly find an entry in a list.
	Stop route calculation.
	Puts your navigation system in Trail Mode. Refer to “Trail Mode” on page 45
	Audible voice guidance is played (synchronized with screen display).

Table 1. Function Buttons At-A-Glance (Continued)

Function Button	Brief Description
	Select map scale.

Navigation Process Flow

All navigation operations begin with the NavMate Navigation System's *Main Menu/Where do you want to go?* screen. From this menu, you have five different options all with the same function: *selecting your destination*. In Table 2, the *Main Menu* options are briefly described for your reference.

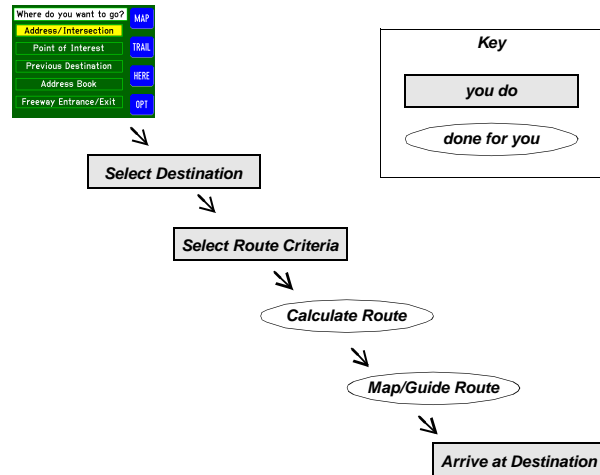
Table 2. Main Menu Options At-A-Glance

Main Menu Option	Select this Option to...
Address/Intersection	Select a destination based on a street address or intersection that you know.
Point of Interest	Select a destination that is a point of interest location. For example, an airport, restaurant, or hospital.
Previous Destination	Select a destination from among the last 10 entered destinations.
Address Book	<ul style="list-style-type: none"> Select a destination from already-added address book entries. Maintain address book entries, which includes adding, deleting, or editing.
Freeway Entrance/Exit	Select a freeway entrance or exit ramp as your destination.

After selecting a destination, you are asked to select route criteria. Route criteria is used to tell the navigation system “how” to calculate your route. Do you want to avoid freeways or drive mostly on freeways? Do you want the shortest time-route regardless of whether there are freeways or not? Also, how much time do you have to give the system to calculate your route? These choices are described in more detail in the Table 8, “Select Route Criteria Screen Options” on page 31.

Finally, the navigation system calculates your route, then guides you to the destination. Proceed to your destination by following the directions. Figure 2 graphically depicts this flow.

Figure 2. Navigation Process Flow



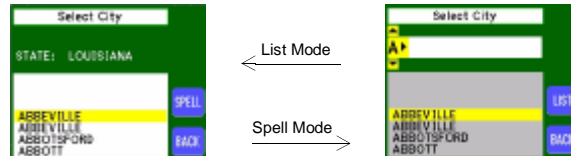
List Mode vs. Spell Mode

From the *Main Menu* screen, you have five different ways in which you can select or enter your destination (or add/edit an entry into the address book). Common to all of these ways, are two different types of selection modes. These modes are:

- *List Mode* – List mode refers to scrolling through a list of names in order to find the right name. The name referred to could be a street, a city, a point of interest, or a freeway. Whatever the type of name, the mechanism is the same, whereby you will select a name from within a long list of names.
- *Spell Mode* – Spell Mode refers to spelling a street, a city, a point of interest, or a freeway. Again, regardless of the type of name, the mechanisms to spell it are the same when in Spell Mode.

Screen 2 illustrates the different looks between List Mode and Spell Mode screens. List Mode has a highlighted bar which you can move to select a name using the arrow buttons; Spell Mode has a spelling entry area at the top of the screen. The highlighted bar moves automatically to correspond with your spelling.

Screen 2. List Mode vs. Spell Mode



When to Use List Mode or Spell Mode

When you are selecting a destination or you are adding names to your address book, sometimes using List Mode seems to be the most efficient; other times, Spell Mode seems more efficient. As you become familiar with your navigation system, you will develop habits as to when it is best for you to use each mode. It is important to note that there is neither a right or wrong way to select a destination at any particular time; it simply depends on what works best for you. Both mechanisms work well and are useful for different reasons. Because of this, both options are offered to give you the most flexibility in managing your navigation system.








Actually *using* the different modes is very different, however, and since both mechanisms are crucial to selecting a destination, learning these mechanisms is very important. Following are some questions and answers to help you determine when you might use List Mode and when you might use Spell Mode.

Table 3. Question/Answer Table for When to Use List or Spell Mode

Question	Answer
When would you want to use List Mode?	Since names are listed alphabetically, when the name you are looking for starts with a letter at the top of the alphabet, then List Mode might work well.
When is List Mode available?	List Mode is available for all <i>Main Menu</i> options. When a screen is initially displayed, List Mode is shown by default. Or, when in Spell Mode, you can easily switch back to List Mode by pressing the LIST button.
When would you want to use Spell Mode?	Spell Mode is most useful when the list to choose from is long, and scrolling through the list is cumbersome. By spelling the name instead, you can locate the name you want more quickly.
When is Spell Mode available?	Like List Mode, Spell Mode is also available for all <i>Main Menu</i> options. When in List Mode, switch to Spell Mode by pressing the SPELL button.

Table 4 shows the button definitions for List Mode and Spell Mode screens. With just a little practice, using the buttons correctly between the different modes will be a matter of habit.

Table 4. Button Definition for List Mode

Button	Mode	Press This Button to...
	List	Move up/down list line by line.
	List	Move up/down to next alphanumeric character groups of names (based on first letter/number) within list.
	Spell	Move up/down through sequence of letters/numbers when spelling.
	Spell	Move cursor to next character position when spelling.
	Both	Display Main Menu.
	Both	Enter selected name that is highlighted.
	Both	Return to previous screen.


The following subsections describe List Mode and Spell Mode mechanisms to be applied, regardless of which *Main Menu* option you choose.

Using List Mode

To select a name while in List Mode, follow these steps:

1. Assuming the screen is already in List Mode (List Mode is the default), use the ▼ button to scroll down the list.




To skip quickly through the alphanumeric groupings use the ◀ or ▶ arrows to quickly jump through the list of names. (e.g., Press the ▶ to jump from the cities that begin with 'C' to the cities that begin with the letter 'D'.)

2. When the name you are looking for appears, use the ▲ or ▼ buttons to highlight the correct name. If there are duplicate names, refer to the "STATE" reference above the list when a name is highlighted.
3. When the correct name is highlighted, press .








These steps for selecting a name while in List Mode apply across the board,

no matter what List Mode screen is displayed.

Using Spell Mode

When you press the  button and go into Spell Mode, a screen is displayed with arrows pointing up, down, and to the right. Use the arrow keys on the display unit to scroll through the alphabet. If you press the  button, you will go through the alphabet backwards, making it quicker to reach letters at the end of the alphabet. As you continue to spell the name, the “Smart” part of the speller only lists those letters for which a corresponding name is in the database. For instance, if you’re spelling the city “Capitola,” when you press C-A-P-I, then press the  button, the next letter displayed is not an ‘A’ but an ‘S’ since there are no cities in the database with any letter before ‘S.’ It becomes increasingly easier to spell as you progress through the name.

To spell a name in Spell Mode, follow these steps:

1. When the screen is in List Mode, press the  button.
2. With the screen in Spell Mode, press the  button to scroll through the letters to the first letter of the name you want to spell. Note that the list below the spelling entry area moves to the corresponding letter that you choose.
3. Use the  button to move the cursor to the second letter position. (At any time during spelling, if needed, use the  button to move the cursor to the left to revise an entry.)
4. Use the  or  buttons again to search and locate the second letter of the name you are spelling from the available options.
5. Use the  button to move the cursor to the third letter position.
6. Continue spelling the name in the same fashion as described in steps 2 through 6.

In most cases, you do not have to spell the entire name; only enough letters to differentiate the spelled name from entries with a similar spelling.

Screen 3. Progressive Screens While Spelling a Name



7. When the name that you are spelling is displayed, use the ▼ or ▲ buttons to highlight the name, then press **ENTER**.

These steps for selecting a name while in Spell Mode apply across the board, no matter what Spell Mode screen is displayed.





Refer to “List Mode vs. Spell Mode” on page 16 as needed.

4 Selecting a Destination

Fundamental to *getting to* your destination is first telling your NavMate Navigation System *what* your destination is. The following subsections describe the five *Main Menu* options in detail.


The function buttons on the *Main Menu* Screen are described as follows:

Table 5. Map Display Screen Function Buttons

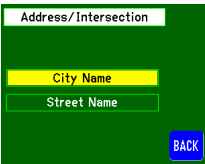
Function Button	Press This Button to...
	Display the <i>Map Display</i> screen.
	Put your navigation system in Trail Mode.
	Show the <i>Current Location</i> screen.
	Display the <i>Option Menu</i> screen.

Address/Intersection

If you know the street address or main intersection of your destination, use the “Address/Intersection” option on the *Main Menu/Where do you want to go?* screen.

Press  to select it, and an *Address/Intersection* screen is displayed.

Screen 4. Address/Intersection Screen



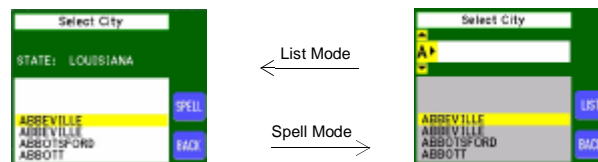
Using the ▲ or ▼ button, highlight/select the option that matches the information that you know about your destination. The options are:

- *City Name* – If you know the city *and* street address, select this option. You could use the “Street Name” option instead, but it is quicker and easier if you use the “City Name” option when you know *both* parts of the address.
- *Street Name* – If you know the street address but you are not sure of the city, select this option. You might use this option, for example, if you were in a large metropolitan area and a street continues through multiple cities and you are not sure of what city is appropriate for the street address number that you know.

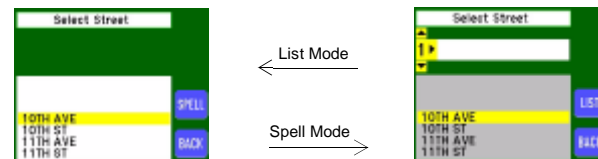
Press **ENTER** to confirm your selection.

Depending on the option you selected, either the *Select City* screen or *Select Street* screen is displayed. When first displayed, they are shown in “List Mode.” To switch to “Spell Mode,” press the **SPELL** button. Refer to “List Mode vs. Spell Mode” on page 16 for more details on using the different modes.

Screen 5. Select City Screens



Screen 6. Select Street Screens



If you selected the “City Name” option, continue by following the prompts on the display screen to select a city first, then street, then address number or intersection. If you selected the “Street Name” option, follow the prompts to select a street name, then a city, then a street address. Be sure to press **ENTER** after each selection.

Eventually the *Select Route Criteria* screen is displayed. Refer to “Selecting Route Criteria” on page 31 for more details.


Points of Interest

The “Point of Interest” option on the *Main Menu/Where do you want to go?* screen is good for when you are going to a public place, or point of interest (POI) location. You might consider specifying a point of interest when you know the name of a destination, like a shopping mall or restaurant, but you do not know the street name or address. The navigation system’s database currently lists thousands of POIs in over 40 categories.

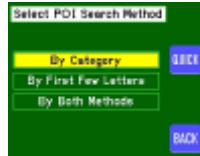
Following are some examples:

- | | | |
|------------------------------|------------------------|-----------------------|
| • Airport | • Gasoline Station | • Rental Car Facility |
| • Amusement Park | • Golf Course | • Rest Area |
| • ATM | • Grocery Store | • Restaurant |
| • Auto Service & Maintenance | • Higher Education | • School |
| • Automobile Club | • Historical Monument | • Shopping |
| • Bank Facility | • Hospital | • Ski Resort |
| • Bus Station | • Hotel | • Sports Complex |
| • Business Facility | • Library | • Tourist Attraction |
| • Casino | • Marina | • Tourist Information |
| • City Center | • Museum | • Train Station |
| • City Hall | • Park/Recreation Area | • Winery |
| • Civil/Community Center | • Park/Ride | |
| • Commuter Rail Station | • Parking Garage/House | |
| • Convention/Exhibition Hall | • Parking Lot | |
| • Court House | • Performing Art | |
| • Ferry Terminal | • Police Station | |

Note. All categories may not be available for all areas on your Map CD.

Using the ▼ button, highlight the “Point of Interest” option from the *Main Menu* screen. Press  and a *Select POI Search Method* screen is displayed.

Screen 7. Select POI Search Method Screen



The *Select POI Search Method* screen offers three different ways to select from all POIs, as shown in Screen 8. The options are described in Table 6.

Table 6. Select POI Search Method Screen Options

Option	Select This Option to...
By Category	List over 40 types of POIs contained in the navigation CD. It is the most general way to select a POI and is similar to the yellow pages.
By First Few Letters	Enter a few letters of a name when you are not sure which category the POI would belong to.
By Both Methods	Select a category, then spell the first few letters of the name. For example, select this option if you are looking for the nearest location of a national franchise, like Taco Bell.

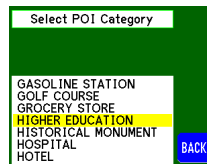
Refer to the following sections depending on the option you select.

After selecting a POI, the *Select Route Criteria* screen is displayed. Refer to “Selecting Route Criteria” on page 31 for more details.

By Category

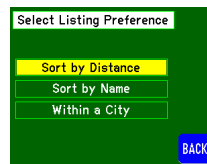
Upon selecting the “By Category” option within the *Select POI Search Method* screen, the *Select POI Category* screen is displayed. Scroll through the list to highlight/select the category you want. (Refer to “Using List Mode” on page 18 for more details.)

Screen 8. Select POI Category Screen



Next, the *Select Listing Preference* screen is displayed, showing three different ways to sort and select from all POI categories.

Screen 9. Select Listing Preferences Screen



Refer to Table 7 to determine which sorting preference will work best for you and the POI you are looking for.

Table 7. Select Listing Preference Screen Sorting Options

Option	Select This Option to...
Sort by Distance	List entries for a POI category, with the nearest POI at the top of the list. For example, select this option if your car needs service and you would like to find the nearest "Auto Service & Maintenance" station.
Sort by Name	List entries for a POI category in alphabetical order. For example, if you would like to find a "Restaurant" that's been recommended, but you only know the name of it and not the location.
Within a City	List entries for a POI category for a specific city. For example, if you would like to find a public park in the city that you are in.

Using the ▲ and ▼ buttons, highlight your choice, and press **ENTER** to select it.

After selecting a POI, the *Select Route Criteria* screen is displayed. Refer to "Selecting Route Criteria" on page 31 for more details.

Note. Some categories may not be available in some areas and all possible POIs may not be listed for all categories. For example, although the "Restaurant" category is very extensive, it is only as current as the Map CD database information. Since businesses change over time, so will the accuracy of your Map CD. Also, several categories restrict the search radius when sorting by distance. For example, a list of national fast food franchises might be huge for a certain area, and you are probably not interested in one 500 miles away. Still, distant POIs may be found using the *Within a City* option.

By First Few Letters

Upon selecting the “By First Few Letters” option within the *Select POI Search Method* screen, the *Enter First Few Letters* screen is displayed. Spell the first few letters of the POI name to narrow the search. (Refer to “Using Spell Mode” on page 19.) If you enter characters and change your mind and want to re-enter different characters, press the **CLEAR** button to clear the POI input area.

Screen 10. Enter First Few Letters Screen



Next, the *Select Listing Preference* screen is displayed (Screen 9), showing three different ways to sort and select from all POI categories.

Refer to Table 7 to determine which sorting preference will work best for you and the POI you are looking for. Using the ▲ and ▼ buttons, highlight your choice, and press **ENTER** to select it.

After selecting a POI, the *Select Route Criteria* screen is displayed. Refer to “Selecting Route Criteria” on page 31 for more details.

By Both Methods

Upon selecting the “By Both Methods” option within the *Select POI Search Method* screen, the *Select POI Category* screen is displayed (Screen 8). Scroll through the list to highlight/select the category you want. (Refer to “Using List Mode” on page 18 for more details.)

Then, the *Input POI Characters* screen is displayed (Screen 10). Spell the first few letters of the POI name to narrow the search. (Refer to “Using Spell Mode” on page 19 for more details.)

Next, the *Select Listing Preference* screen is displayed (Screen 9), showing three different ways to sort and select from all POI categories.

Refer to Table 7 to determine which sorting preference will work best for you and the POI you are looking for. Using the ▲ and ▼ buttons, highlight your choice, and press **ENTER** to select it.

After selecting a POI, the *Select Route Criteria* screen is displayed. Refer to

“Selecting Route Criteria” on page 31 for more details.

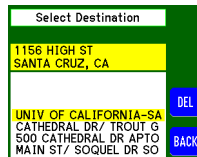
Previous Destination

The last 10 destinations entered into your navigation system are automatically saved into the memory of the navigation system’s computer. This capability is helpful when you want to return to a recent destination, such as a hotel where you may be staying.

You do not have to drive the route or arrive at the destination for a destination to be saved; you only need to have selected it. After 10 destinations have been entered into the system, the most recently selected destination replaces the oldest destination.

Upon selecting the “Previous Destination” option from the *Main Menu/Where do you want to go?* screen, a *Select Destination* screen is displayed.

Screen 11. Select Destination Screen



Scroll the list using the ▲ or ▼ buttons. Note that the full address of each highlighted destination is displayed in the upper portion of the screen. When the destination you want is highlighted, press **ENTER** to select it.

After selecting a destination, the *Select Route Criteria* screen is displayed. Refer to “Selecting Route Criteria” on page 31 for more details.

To delete a “Previous Destination” from the list, highlight the destination you want to delete. Press the **DEL** button. A *Delete Confirmation* screen asks if you are sure you want to make the deletion.

- If yes, press **ENTER** to confirm.
- If no, press **BACK** to cancel.

Address Book

The Address Book is a convenient method to alphabetically store frequently

visited destinations. You can have up to 30 address book entries at any one time. Upon selecting the “Address Book” option from the *Main Menu/Where do you want to go?* screen, you can either:

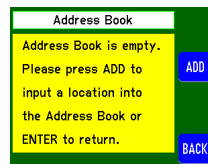
- Select a Destination from those already added to the Address Book.
- Maintain Address Book entries, which includes adding, deleting, and editing the entries.

Selecting an Address Book Entry as a Destination

Upon selecting the “Address Book” option from the *Main Menu* screen, an *Address Book* screen is displayed. The Address Book screen will either:

- list all existing Address Book entries,
- or, if no entries have previously been added, an empty Address Book screen is shown. (Press the **ADD** button to add an entry.)

Screen 12. Address Book Empty Screen



To select an address book entry, scroll the list using the **▲** or **▼** buttons. Note that the full address of each highlighted destination is displayed in the upper portion of the screen. When the destination you want is highlighted, press **ENTER** to select it.

After selecting a destination, the *Select Route Criteria* screen is displayed. Refer to “Selecting Route Criteria” on page 31 for more details.

Adding, Deleting, or Editing in the Address Book

Upon selecting the “Address Book” option from the *Main Menu* screen, an *Address Book* screen is displayed listing all existing Address Book entries. To add, delete, or edit an address book entry, press **ADD**, **DEL**, or **EDIT**, respectively.

You can have up to 30 address book entries. An error message is displayed if you attempt to add an entry and you are already at the limit.

The mechanism to add entries is the same as selecting a destination. For example, to select the destination, you have the following options:

- Address/Intersection
- Point of Interest
- Previous Destination
- Freeway Entrance/Exit
- Current Location

For entering/selecting address book entries, refer to “Selecting a Destination” on page 21 for descriptions of these options. Also, refer to “List Mode vs. Spell Mode” on page 16 for more details.

After selecting a destination to add, a *Name Address Book Entry* screen is displayed, allowing you to spell a personalized name for the selected destination. Spell a name for the entry that will be easy for you to remember.

Freeway Entrance/Exit

If you want to select a freeway entrance or exit, or the intersection of two freeways as a destination, select the “Freeway Entrance/Exit” option from the *Main Menu/Where do you want to go?* screen. A *Select Freeway* screen is displayed.

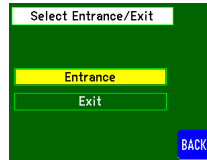
Screen 13. Select Freeway Screen



When first displayed, the *Select Freeway* screen is in “List Mode.” To switch to “Spell Mode,” press the **(SPELL)** button. Refer to “List Mode vs. Spell Mode” on page 16 for more details on using the different modes.

After selecting a freeway name, a *Select Entrance/Exit* screen is displayed.

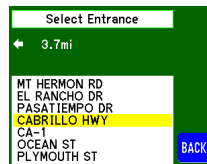
Screen 14. Select Entrance/Exit Screen



Depending on the freeway name previously selected, using the ▲ and ▼ buttons to highlight either “Entrance” or “Exit,” as appropriate. Then, press **ENTER**.

A *Select Entrance* screen (or *Select Exit* screen, if applicable) is displayed, listing all entrances/on ramps (or exits/off ramps) to the previously selected freeway.

Screen 15. Select Entrance Screen



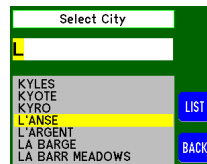
The nearest entrance (or exit) is highlighted and those further away in each direction from the highlighted entrance are then listed. Straight-line distance is shown at the top of the screen.

After selecting an entrance (or exit), the *Select Route Criteria* screen is displayed. Refer to “Selecting Route Criteria” on page 31 for more details.

5 Selecting Route Criteria

Regardless of *how* you select your destination — whether you select an address, intersection, point of interest, previous destination, address book entry, or freeway entrance or exit — after the destination has been selected, the *Select Route Criteria* screen is displayed. This is the final step before your route is calculated.


Screen 16. Select Route Criteria Screen



Before calculating your route, the navigation system wants to know which of the route criteria options are the most important to you. Route criteria tell the navigation system *how* to calculate the route. The route criteria options are described in Table 8.

Table 8. Select Route Criteria Screen Options

Criteria	Option	Select This Option if...
Criteria 1 Select one of these options	Quick	You want a route calculation to be provided as quickly as possible. The first direction is quickly provided, and the rest of the route is calculated in the background as you proceed to your destination. Background calculations use the “Optimal” approach.
	Optimal	You want the route calculation to consider both time and distance, strategically, for the whole route. All route calculations are completed before the first direction is given. This option takes a bit longer for the system to process.
Criteria 2 Select one of these options.	Shortest Time Route	You want the route calculation to consider criteria such as posted speed limits, turn restrictions, type of street (city, rural, freeway), etc., to minimize driving time.
	Use Freeways	You want the route calculation to avoid surface streets as much as possible and use freeways as much as possible.
	Avoid Freeways	You want the route calculation to avoid freeways as much as possible.

Use the ▼ ▲ and ◀ ▶ buttons to highlight your selections, then press . The navigation system immediately starts calculating the route and begins directing you to your destination.

Refer to “Route Calculation and Guidance Screens” on page 33 for details on the route calculation and guidance screens displayed when a route has been calculated.

6 Route Calculation and Guidance Screens

This section illustrates and explains how to use and interpret information on the navigation system's screens once the route has been calculated. The available screens are briefly described as follows:

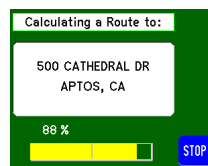
Table 9. Route Calculation and Guidance Screens At-A-Glance


Screen Name	Brief Description
Route Calculation Screen	This screen is displayed when route is being calculated. It shows a meter indicating the percent complete while calculating the route and the destination name and address.
Please Proceed Screen	This screen is displayed when guidance begins. It shows your vehicle's position, a surrounding map, and distance to travel. It is similar to <i>Map Display</i> screen.
Planned Route Screen	This screen shows a list of the planned route. It is only available before you have started driving the route when your vehicle is not moving. To access this screen, you press the PLAN button. You can also preview/review complete route while underway by using the ▼ or ▲ buttons on the <i>Guide Display</i> screen.
Guide Display Screen	This screen is your main "guidance" screen, providing you with large icons to suggest turns or maneuver changes. In addition, it always provides your distance to the destination. It is the screen displayed before the system switches to a close-up <i>True View (Intersection)</i> screen. Press the GUIDE button to access when applicable.
True View (Intersection) Screen	This screen results from a <i>Guide Display</i> screen automatically when you are within 0.2 miles of a turn or intersection that is part of your route. It shows a close-up of the upcoming intersections.
Map Display Screen	This screen graphically shows a map at the current location of your vehicle. It is continually being updated as your vehicle moves along your route. It is a very informative screen since it shows surrounding streets and landmarks. Press the MAP button to access whenever you want.
Current Location Screen	This screen, in text, shows where you are at any time. It also is continually being updated as you move along your route.
Arrival Screen	This screen is displayed when you reach your destination.

Route Calculation Screen

While the navigation system is calculating a route, a processing screen similar to this appears. The specific destination you selected appears in the center white box.

Screen 17. Calculating Route Screen



This display lasts for less than 15 seconds when using Quick calculation (as selected for Route Criteria). For Optimal calculations, the time may be somewhat longer. If you suddenly change your mind and want to enter a new destination or change your route criteria, press the  button to cancel the route calculation.

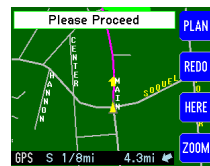
Note. During the very first calculation following start-up, your navigation system will display a temporary “Please Wait” notice on this screen while voice data is being loaded from the CD.

Please Proceed Screen

When route calculations are complete, a *Please Proceed* screen automatically appears with a map showing the calculated route in pink. Major freeways are in blue. Other streets are shown in white. A green triangle icon indicates vehicle heading and location. A yellow arrow shows the direction to be traveled. Since this screen closely resembles the *Map Display* screen, other mapping landmarks and screen footer details are described in “Map Display Screen” on page 38.

Screen 18 illustrates a typical *Please Proceed* screen.

Screen 18. Please Proceed Screen



green triangle shows your vehicle's heading and location.
yellow arrow shows the direction to be traveled.
pink line shows the planned route.

Once the vehicle is on the highlighted route, the *Please Proceed* screen automatically changes to a *Guide Display* screen, showing the next turn.

The function buttons on this screen are described as follows:

Table 10. Please Proceed Screen Function Buttons

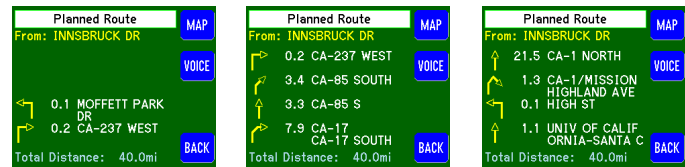
Function Button	Press This Button to...
	Preview the entire planned route in the <i>Planned Route</i> screen. This button is only available <i>before</i> proceeding on your route.
	Start over and re-enter your destination.
	Show the <i>Current Location</i> screen.
	Adjust the zoom level of the displayed map. Current level is in the footer of the screen. For example, in Screen 18, the level is 1/8 mile per inch of screen.

Planned Route Screen

When the button is pressed on the *Please Proceed* screen, a *Planned Route* screen is displayed. The button is not available after you have started driving to your destination, although you can preview/review your complete route while underway by using the ▼ or ▲ buttons on the *Guide Display* screen. If you immediately start driving on the highlighted route, the *Planned Route* screen is bypassed.

Following is an example of the *Planned Route* screen. It shows the route’s turns, streets, and mileage to be traveled. Use the ▼ or ▲ buttons to review the planned route.

Screen 19. Progressive Screens When Scrolling through a Planned Route



The function buttons on this screen are described as follows:

Table 11. *Planned Route* Screen Function Buttons

Function Button	Press This Button to...
	Display the <i>Map Display</i> screen.
	Audible voice guidance is played (synchronized with screen display).
	Go back to the previous screen.

Guide Display Screen

Once the vehicle is on the highlighted route, the *Please Proceed* screen automatically changes to a *Guide Display* screen, showing the next turn. In addition, voice prompts are heard to direct you. As you continue on the route, the *Guide Display* screen and voice prompts are continually updated to correspond with your progress to the destination.





Screen 20 is an example of the *Guide Display* screen. It shows a directional icon for your next turn.

Screen 20. Guide Display Screen



The function buttons on this screen are described as follows:

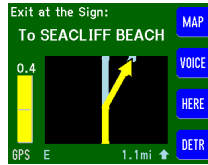
Table 12. Guide Display Screen Function Buttons

Function Button	Press This Button to...
	Display the <i>Map Display</i> screen.
	Audible voice guidance is played (synchronized with screen display).
	Show the <i>Current Location</i> screen.
	Modify the calculated route with “detour” criteria. Refer to “Detours, Off-Route, and Interruptions” on page 42

True View (Intersection) Screen

About 0.2 miles before an intersection, the *Guide Display* screen changes automatically to a close-up of the intersection. This feature, in conjunction with precise voice prompts, makes it easy to remain on your route and not miss turns. This screen is called a *True View (Intersection)* screen as shown in Screen 21

Screen 21. True View (Intersection) Screen







yellow line/arrow shows upcoming intersection.

left-side "meter" shows distance to intersection.

The *True View (Intersection)* automatically returns to a *Guide Display* screen once the turn at the intersection has been completed.

The function buttons on this screen are described as follows:

Table 13. *True View (Intersection)* Screen Function Buttons

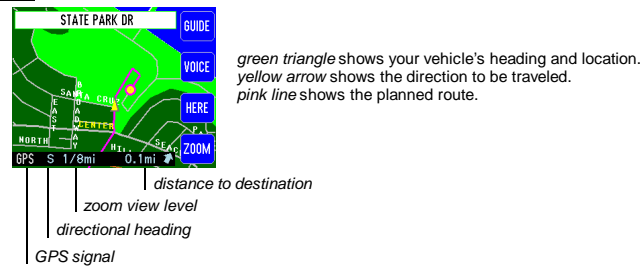
Function Button	Press This Button to...
	Display the <i>Map Display</i> screen.
	Audible voice guidance is played (synchronized with screen display).
	Show the <i>Current Location</i> screen.
	Modify the calculated route with "detour" criteria. Refer to "Detours, Off-Route, and Interruptions" on page 42

Map Display Screen

The *Map Display* screen (which is similar to the *Please Proceed* screen) shows the calculated route in pink. Major freeways are blue. Other streets are shown in white. A green triangle icon indicates vehicle heading and location. A yellow arrow indicates the direction to be traveled. Light green areas, as shown in Screen 22, depict a park. Large blue masses depict water, like a lake or ocean. Railroad tracks are shown in brown and airports are brown squares. When your destination is within map view, it is marked with a "bull's-eye" type icon.

In addition, the footer of the screen shows the GPS signal, directional heading, zoom view level, and the distance to your destination at any time.

Screen 22. Map Display Screen



Depending on the landscape that you encounter along your route, the GPS signal might change colors indicating the strength of the signal. The GPS signal color codings are described as follows:

- green – GPS signal is free from obstruction and is being received regularly.
- yellow – GPS signal is partially blocked by obstructions, such as tall trees or skyscraper buildings.
- red – GPS signal is unavailable. GPS signal is entirely blocked by obstructions such as tall trees or buildings.

For NavMate Navigation System: Your navigation system does not require a constant GPS signal due to its additional sensors. Refer to “Vehicle Direction-Sensing Electronics” on page 1 for more details.

For Portable NavMate Navigation System: Your navigation system will show the *GPS Signal Lost* screen with its step-by-step planned route instructions, but it will not prompt you with upcoming turns until the GPS signal is restored.





Note. There are two *Map Display* screen modes available on your navigation system. (1) an active route Map Display shows your current route, and (2) a Map Display when no route is active. When no route is active, the **MARK** button shows on the display.

The function buttons on this screen are described as follows:


Table 14. Map Display Screen Function Buttons

Function Button	Press This Button to...
GUIDE	Display the <i>Guide Display</i> screen.

Table 14. Map Display Screen Function Buttons (Continued)

Function Button	Press This Button to...
	Audible guidance is played (synchronized with screen display).
	This button is only available when you are not on a route. Pressing this allows you to add your current location into the Address Book.
	Show the <i>Current Location</i> screen.
	Adjust the zoom level of the displayed map. Current level is in the footer of the screen. For example, in Screen 18, the level is 1/8 mile per inch of screen.



Current Location Screen

Your current location can be displayed at any time from the *Main Menu*, *Guide Display*, or *Map Display* screens. Press the  button and the screen provides your current location (road/freeway, city, and state) and name and mileage to next and last major intersections or freeway entrance/exits.

Screen 23 illustrates a typical *Current Location* screen when on a normal roadway. When on a freeway, previous and next exit names are listed instead.

Screen 23. Current Location Screen



To get data about your current location, press the  button on the Menu, then press the  button. Your current location is then listed with latitude, longitude, and altitude.

Screen 24. GPS Current Location Screen




Arrival Screen

When you are approaching your destination, the destination is shown on the *Map Display* screen with a "bull's-eye" icon. A voice message announces that you are approaching your destination.

When you have arrived, the name and address of your destination is displayed. A voice message announces that you have arrived. Following is an example of a destination arrival screen.

Screen 25. Destination Arrival Screen




To enter a new destination for a new route to be calculated, press the  button.

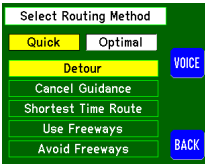
7 Detours, Off-Route, and Interruptions

If you encounter road construction, traffic jams or undesirable roads, the navigation system can quickly calculate the most efficient detour to the currently selected destination.

Detour Options

With the screen in the *Guide Display* mode, press the  button. A *Detour Menu* screen, similar to the *Select Route Criteria* screen (refer to “Selecting Route Criteria” on page 31 for more details) is displayed.

Screen 26. Detour Menu Screen



Different from the *Select Route Criteria* screen, however, are two new options:



- *Detour* - Select this option if you would like to specify further detour criteria to the system so it can reroute using selected detour considerations.
- *Cancel Guidance* - Select this option to cancel route guidance. The *Main Menu* is displayed. Select “Cancel Guidance” any time you want to turn guidance OFF, or to enter a new destination.

If you select “Detour” option, a *Select Detour Criteria* screen is displayed. Refer to Table 15 for descriptions of the displayed options.


Table 15. Select Detour Criteria Options



Option	Select This Option to...
Avoid Current Road	Avoid the road you are currently on. Upon selecting this option, the route is immediate recalculated.


Table 15. Select Detour Criteria Options (Continued)

Option	Select This Option to...
Avoid Next Road	Avoid next road in your planned route. Upon selecting this option, the route is immediate recalculated.
Detour X Miles	Recalculate a route away from the planned route for a certain number of miles. Upon selecting this option, you are prompted to enter how many miles to detour away from the current road (range based on the length of the original route). Use the ▼ and ▲ buttons to enter a number. Then, press  .
Avoid Specific Road	Avoid a specific road in your planned route. Using the ▼ and ▲ buttons, you may select a specific road from your planned route to avoid. Then, press  .

Off-Route Procedures

If you leave the calculated route (missed turn, decided to take an alternate route, etc.), the NavMate Navigation System will automatically calculate a new route if the Auto Reroute preference is set to ON. If the Auto Reroute preference is set to OFF, navigation halts. The Auto Reroute preference is available from the *Main Menu* using the  button.

- If Auto Reroute is ON - A new route is automatically recalculated to the same destination. Route guidance is adjusted and begins immediately and automatically.
- If Auto Reroute is OFF - If Auto Reroute is OFF, the routing is halted. If you want to cancel guidance, press the  button. If you want the navigation system to calculate a new route, press .

If you press  for a new route, the *Route Calculation* screen is displayed. When calculation is completed, route guidance begins again.

Route Interruption

If you leave the route to stop at a restaurant or gas station, for example, and turn the ignition key off, your navigation system remembers your destination, but not the turns already completed.

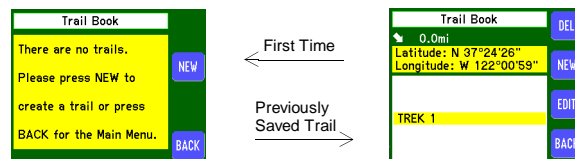
- If the ignition is not turned OFF or the Cigarette Lighter Adapter is plugged in (in the case of Portable NavMate) – Simply return to the highlighted route or a nearby road. The NavMate Navigation System will recalculate your route.
- If the ignition is turned OFF or the Cigarette Lighter Adapter is unplugged (in the case of Portable NavMate) – The *Do you want to continue route guidance* screen will be displayed at start-up. If you highlight “Discontinue” and press **ENTER** you will be returned to the *Main Menu*. If you highlight “Continue” and press **ENTER**, your navigation system displays the *Select Route Criteria* screen. (Refer to “Select Route Criteria Screen Options” on page 31 for more details.)

8 Trail Mode

When you use the “Trail Mode” feature with your NavMate Navigation System, your system becomes a compass-like tool for off-roading adventures. You can go off-road and the system keeps track of mid-route “way point” references which are stored in memory for returning on your path. The collective way points make up a saved Trail Book entry in case you want to return to the same trail later.

By pressing the **TRAIL** button on the *Main Menu/Where do you want to go?* screen, a *Trail Book* screen is displayed. If it is your first time using the Trail feature, your screen will say that there are no trails. If you have used Trail Mode before, the Trail Book screen will list your previously saved trails.

Screen 27. Trail Book Screens



The mechanisms for saving, naming, and editing trails in your trail book are much like the mechanisms used with the Address Book feature. (Refer to “Adding, Deleting, or Editing in the Address Book” in the *User’s Manual*.)

Creating trails “to be saved,” however, is a little different. Still, it is easy to use. Follow these steps:

1. From the *Trail Book* screen, as soon as you go “off-road,” press the **NEW** button.

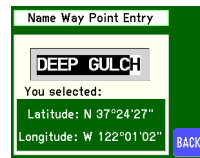
2. A *Blazing Trails* screen is displayed, showing a map display of where you begin your off-road trek. As you progress on your trail, a dotted line represents your trail.

Screen 28. Progressive Blazing Trails Screens



3. Before driving too far, press the **MARK** button to name a way point.
4. A *Name Way Point Entry* screen is displayed where you can name it by a landmark or something that will remind you of it. Spell a name for your way point.

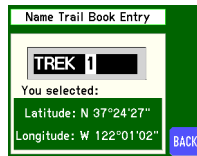
Screen 29. Name Way Point Entry



5. Every now and again, press the **MARK** button to add/name more way points. Do not be conservative. Create a way point whenever it makes sense, and the more the better.
6. When you reach your destination, like a campsite that you might have been looking for, press the **STOP** button.

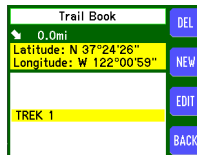
The system stops tracking your path and a *Name Trail Book Entry* screen is displayed. Spell a name for your trail.

Screen 30. Name Trail Book Entry Screen



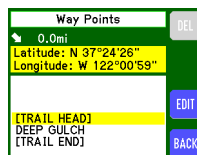
7. Upon entering a new Trail Book entry, the *Trail Book* screen is again displayed, listing your new Trail Book entry.

Screen 31. New Trail Listed in Trail Book Screen



By selecting a trail from within the *Trail Book* screen, and pressing the **ENTER** button, you can review (edit or delete) the Way Points list for that particular trail entry at any time.

Screen 32. Way Points Screen



The next time you go off-roading, you can follow the same trail you just created or you can create a new trail just as we did here.

Note: When using your NavMate Navigation System in Trail Mode, make sure you are aware of local hazards, restrictions, laws, and personal insurance coverage before travelling off-road.

9 Portable Mode

Portable NavMate Navigation system uses GPS signals and internal sensors to determine location of the vehicle. This allows the system to be easily transported from one vehicle to another. To turn the Portable Mode 'on', just press **OPT** on the Main Menu, then use the arrow keys to select Portable. On the *Portable* screen, use the arrow key to turn on.

Screen 33. Portable Mode Screens



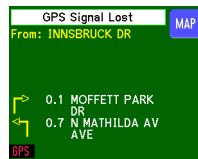
Note: If you have an Installed (Hard-Wired) NavMate unit, please make sure that this mode is always turned off.

When your NavMate is in the Portable Mode (GPS only) and you lose the GPS signal, NavMate will show the *GPS Signal Lost* screen with its step-by-step Planned Route instructions, but will not prompt you for upcoming turns until the GPS signal is restored.


Pressing the **MAP** button will take you temporarily to the *Map* Screen, though the position icon will not move. After a few seconds, the screen will return to the *GPS Signal Lost* screen.

Portable NavMate uses GPS satellites to find and maintain the position of your vehicle. When your vehicle is surrounded by tall buildings or dense trees, travelling through a tunnel or inside a parking garage, these satellites are not visible to the system. During extended outages the system's ability to maintain the correct position is degraded, depending on the outage's length.

Screen 34. GPS Signal Lost Screen and temporary Map Screen



10 Option Menu

After using your NavMate Navigation System for a while, you may want to explore and adjust some of the available system options. From the *Main Menu* screen, press the  button and the *Option Menu* screen is displayed.

Screen 35. Option Menu Screen



Explore all three levels of options to better understand your system.


Preferences

Upon selecting the *Preferences* option from the *Option Menu* screen, the *Preferences Option* screen is displayed.

Screen 36. Preferences Option Screen



The Preferences screen displays four system adjustments, as follows:

- *Map Scale* – Indicates the default map scale in miles per inch of screen for the *Map Display* screen. (Refer to “Map Display Screen” on page 38 for more details.) Can also be changed by pressing the  button on map screen.
- *Map Orientation* – “Heading Up” means the direction of travel is at top of the screen. “North Up” means North is at the top of the screen. Default is “Heading Up.”

- *Volume* – Indicates the volume level. Use the ◀ or ▶ buttons to increase or decrease volume.
- *Auto Reroute* – When ON, automatically recalculates a route if you miss a turn. When OFF, you have the option to re-enter a new route. Default is ON.

Use the ◀ or ▶ button to highlight or change any selections. Press **ENTER**.

System Information

Upon selecting the *System Information* option from the *Option Menu* screen, the *System Information* screen is displayed.

Screen 37. System Information Screen



This screen includes the following non-changeable information:

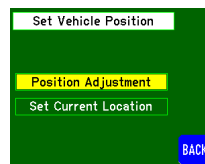
- *Software Version* – The software version of your navigation system.
- *Database Version* – The database version of the Map CD.
- *Database Area* – The database coverage area that the Map CD includes.

Press the **BACK** button to return to the *Options Menu* screen.

Vehicle Position

Upon selecting the *Vehicle Position* option from the *Option Menu* screen, the *Set Vehicle Position* screen is displayed.

Screen 38. Set Vehicle Position Screen

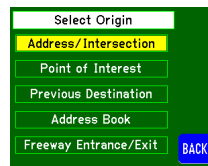


The options are described as follows:

- *Position Adjustment* – Select this option to display a map showing an arrow icon indicating your vehicle’s current position. If you need to change the icon’s position, use the ▼ or ▲ and ◀ or ▶ buttons to adjust. Press **ENTER** to return to the *Main Menu* screen. Destinations will be calculated from the new position.
- *Set Current Location* – Select this option to reset the current location of the vehicle by defining a specific location, just as you would select a destination. Although here, you start with a screen called *Select Origin* instead.

You might want to use these options to review a planned route of a destination you will try at a different time; so in a sense, you would “fake” your current location.

Screen 39. Select Origin Screen



For entering/selecting your current location, refer to “Selecting a Destination” on page 21 for descriptions of these options. Also, refer to “List Mode vs. Spell Mode” on page 16 for more details. The mechanisms are exactly the same; only you’ll be defining a current location rather than a destination.

After selecting a new “current location,” press **ENTER**. Then, press the **MAP** button and the *Map Display* screen will indicate the new location you have set. Future route instructions will be calculated from this location until the vehicle is driven again. When you drive, the system will automatically determine your actual location.

NavMate Navigation System

NavMate® 2.0 User Manual

**Horizon Navigation, Inc.
4701 Patrick Henry Drive
Suite 1301
Santa Clara, CA 95054
www.HorizonNav.com**

Copyright 1999 Horizon Navigation
August 29, 2003 - Rev. 1



NavMate Navigation System